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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,176	06/13/2006	Eric Dubois	13332-00007-US	7543

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WILMINGTON, DE 19899

EXAMINER
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MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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01/07/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/550,176

**Applicant(s)**

DUBOIS ET AL.

**Examiner**

BARBARA J. MUSSER

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-24 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Newly submitted claim 24 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The method can be used to make a different article such as a plastic container. This claim is properly grouped with claims 11-16, which are nonelected.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17, 18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short(U.S. Publication 2004/0071904A1) in view of Schmoyer(U.S. Publication 2003/0091741A1).

Short discloses a method of making a fuel tank by thermoforming a multi-layer sheet into a fuel tank.[0018] Thermoforming is a type of compression molding since it applies heat and pressure to mold a substrate into a given shape. The references also disclose the fuel tank is sulfonated.[0023] The reference does not disclose attaching a

sulfonated part to an opening of the fuel tank which closes the opening. Schmoyer discloses a method of sulfonating both fuel tanks and accessories such as filler necks and rollover valves.[0002] The reference discloses the accessories are placed in an enclosed chamber and sulfonated, suggesting they are not attached to the fuel tank at the time of sulfonation.[0013] It would have been obvious to one of ordinary skill in the art at the time the invention was made to sulfonate the accessories as suggested by Schmoyer and then attach them to the openings of the fuel tank, closing them off since Schmoyer suggests the accessories are sulfonated separately from the fuel tank and since they have to be joined to the fuel tank at some point. While Schmoyer does not explicitly state the accessories are applied to openings and close them off, the accessories cited are the same applicant claims in claim 23 and thus would be located in the same locations and close off the openings in the same manner. Since these accessories are placed in an enclosed chamber and sulfonated, one in the art would appreciate that the entire surface of the accessory would be sulfonated and thus the part in contact with the interior of the gas tank would be sulfonated.

Regarding claim 18, It would have been obvious to one of ordinary skill in the art at the time the invention was made to weld the accessory to the fuel tank since the use of welding to bond thermoplastics together is well-know and conventional in the thermoplastic bonding arts.

Regarding claim 21, since the accessory is located within a tank which is filled with material that sulfonates the polymer, the entire part including the portion which is later bonded to the fuel tank would be sulfonated.

Regarding claims 22 and 23, Schmoyer discloses the accessories can be filling necks and rollover valves.[0050]

4. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short and Schmoyer as applied to claim 17 above, and further in view of the admitted prior art and Walles(U.S. Patent 3,613,957)

The references cited above do not disclose the specific polymers used or that the sulfonated polymer is rinsed prior to neutralization though Schmoyer does disclose the sulfonation is caused by sulfur trioxide[0011].. Schmoyer does disclose the sulfonated polymer is neutralized.[0038] The admitted prior art discloses adding a polyalkyleneimine to the polymer to be sulfonated. Walles discloses the sulfonated polymer is rinsed and then neutralized.(Col. 4, ll. 47-59) It would have been obvious to one of ordinary skill in the art at the time the invention was made to include polyalkyleneimine in the polymer of the fuel tank of Short and Schmoyer since the admitted prior art discloses this is a known polymer for sulfonating and to rinse the treated polymer before neutralizing since Walles shows this is conventionally done and since Schmoyer discloses the sulfonation creates a rinseable salt.[0004]

As to the limitation of the accessory being molded, Schmoyer discloses that such accessories are conventionally blow molded.[0002]

#### ***Response to Arguments***

5. Applicant's arguments filed 9/15/09 have been fully considered but they are not persuasive.

Regarding applicant's argument that one in the art combining Smith and Schmoyer would treat the sheets of Short and then assemble them into a tank, one in the art would not think to treat the sheets of Smith before forming them into a tank since Schmoyer teaches treating a formed tank, not the sheets used to make the tank. Schmoyer clearly teaches the accessories can be treated separately, suggesting they can then be joined with a formed tank. Whether the reference also suggests treating the tank is not relevant since the claim does not require or prohibit it. However, the fact that the reference teaches treating the accessories which can be joined to the tank separately from the tank suggests the accessories can be used with a variety of tanks.

Regarding applicant's argument that his method gives unexpectedly better results, applicant has provided no evidence of unexpected results.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA J. MUSSEY whose telephone number is (571)272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJM  
/B. J. M./  
Examiner, Art Unit 1791

/Richard Crispino/  
Supervisory Patent Examiner, Art Unit 1791